VIKING COMPONENTS

MEMORY INSTALLATION GUIDE

COMPACTFLASH™

Memory Card

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MEMORY INSTALLATION GUIDE:

CompactFlash™ Memory Card

This guide will cover the installation and care of Viking's CompactFlash Memory and optional adapter.

Description	Viking P/N
CompactFlash Adapter	CF-ADAPT, RCF-ADAPT
4MB CompactFlash	CF4M, RCF4M
8MB CompactFlash	CF8M, RCF8M
12MB CompactFlash	CF12M, RCF12M
16MB CompactFlash	CF16M, RCF16M
24MB CompactFlash	CF24M, RCF24M
32MB CompactFlash	CF32M, RCF32M
48MB CompactFlash	CF48M, RCF48M
64MB CompactFlash	CF64M, RCF64M
80MB CompactFlash	CF80M, RCF80M

⚠ Caution:

Electro Static Discharge (ESD) can damage electronic components. Before touching the memory module, ensure that you are discharged of static electricity by touching a grounded metal object.

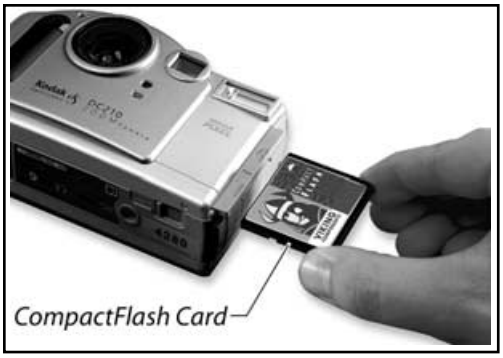
BASIC HANDLING INSTRUCTIONS:

- **Do not bend or flex the card or the adapter.**
- **Do not drop the card or the adapter.**
- **Keep the card and adapter away from moisture.**
- **Keep the card and adapter out of direct sun light.**

DIGITAL CAMERA INSTALLATION INSTRUCTIONS:

1. The CompactFlash memory card can be inserted into numerous digital cameras to store pictures. The card can then be used to transfer the pictures into a laptop or a handheld PC. The installation of a CompactFlash card into a laptop or a handheld PC may require an optional CompactFlash adapter. Please refer to the section "*CompactFlash Adapter Installation Instructions*" for more information.

To install a memory card into a digital camera, align the notches on the card with those of the CompactFlash socket in the camera. Then firmly insert the card into the socket until it is completely seated.

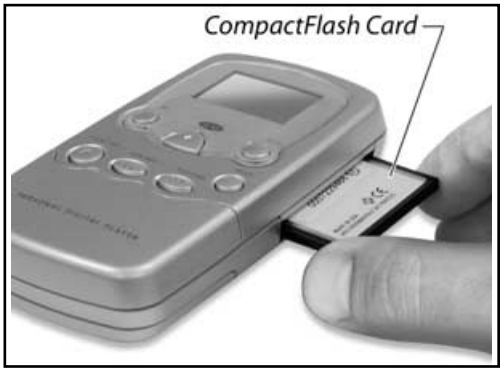


If you are not familiar with the procedure of installing and removing a CompactFlash memory card into your digital camera, please refer to the camera's "*Owner's Guide.*"

MP3 PLAYER INSTALLATION INSTRUCTIONS:

1. The CompactFlash memory card can be inserted into numerous MP3 Players. The card can then be used to store music in MP3 format for play on your MP3 player. The card can also be used to transfer MP3 music files from your MP3 player to your laptop or handheld PC. The installation of a CompactFlash card into a laptop or a handheld PC may require an optional CompactFlash adapter. Please refer to the section "*CompactFlash Adapter Installation Instructions*" for more information.

To install a memory card into a MP3 player, align the notches on the card with those of the CompactFlash socket in the player. Then firmly insert the card into the socket until it is completely seated.



If you are not familiar with the procedure of installing and removing a CompactFlash memory card into your digital camera, please refer to the camera's "*Owner's Guide.*"

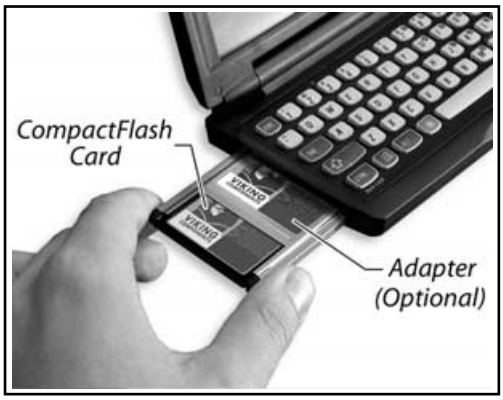
Note: The MP3 player may require the latest software from the player's manufacturer to initialize or use the card.

LAPTOP/ HANDHELD PC INSTALLATION INSTRUCTIONS:

1. The CompactFlash memory card can be inserted into numerous laptops or handheld PCs to store information. The card can then be used to transfer files from your laptop or handheld PC to other laptops, handheld PCs, digital cameras or MP3 players. The installation of a CompactFlash card into a laptop or a handheld PC may require an optional CompactFlash adapter. Please refer to the section "*CompactFlash Adapter Installation Instructions*" for more information.

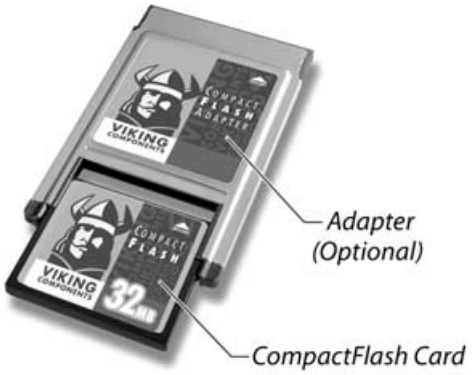
To install a memory card into a laptop or handheld PC, align the notches on the card with those of the CompactFlash socket in the system. Then firmly insert the card into the socket until it is completely seated.

If you are not familiar with the procedure of installing and removing a CompactFlash memory card into your digital camera, please refer to the camera's "*Owner's Guide.*"



COMPACTFLASH ADAPTER INSTALLATION INSTRUCTIONS:

To install a memory card into an adapter, align the notches on the card with those on the adapter. The Viking logo on the card and on the adapter should both be face up. Then firmly insert the card into the adapter until it is completely seated.



TRANSFERRING FILES INSTRUCTIONS:

In most systems the CompactFlash card is seen as a hard drive.

Windows Based Systems:

In Windows 95 and Windows NT 4.0 based systems, go to the icon "*My Computer*" on your systems desktop and double-click on it. You should see the card listed.

Mac OS Based Systems:

For Apples with Mac OS 7.53 or later (with Macintosh PC Exchange loaded), the card will appear on the desktop.

Note: Do not format or initialize the card in a Mac OS based system. This can only be done in a Windows based system.

Simply double-click on the card to open it. Information can then be placed on it or retrieved from it like any other storage device.

TROUBLESHOOTING:

General:

1. If the CompactFlash card and adapter are not seen by your computer.

• Some systems may have all of their IRQs occupied by built-in devices. A built-in device may need to be disabled.

Windows:

1. I have one of your Compact Flash memory cards and when I put it in my laptop, Windows tries to install a new hard drive. Is this correct?

• Windows will see the CompactFlash card as a hard drive and will install the Standard IDE/ESDI Hard Disk Controller. This is correct and Windows should be allowed to proceed. After rebooting, you should see a new drive letter in "*My Computer*" or in "*Windows Explorer*" assigned to the Viking flash card.

2. Windows installed the Standard IDE/ESDI Hard Disk Controller, but on rebooting, I do not have an extra drive letter and do not see the Flash card in My Computer or Windows Explorer. Now what do I do?

• Click on "*Start*", and then on "*Settings*", and then on "*Control Panel*." Double-click on "*System*" and select the "*Device Manager*" tab. Expand the Hard Disk Controller branch. You should see a Dual IDE Controller. If not, select the "*Properties*" of each controller until you find the one that has a "*Settings*" tab (only one will have it). On the "*Settings*" tab, change the setting Default to "*Both IDE Channels Enabled*." Back out saving the settings by clicking on "*OK*" or "*Close*." Reboot the system and insert the flash card. Allow Windows to correctly install the Standard IDE/ESDI Hard Disk Controller, as it will suggest doing. Reboot the system and you should see a drive letter for the flash card. If it is still not seen, give us a call.

Windows NT 4.0:

Though Windows NT may detect your CompactFlash card, it may not be accessible under NT. You may be able to correctly configure a drive letter for your card by using Disk Administrator and reassigning drive letters. To simplify the installation you should install CardWizard. With CardWizard by SystemSoft installed your CompactFlash will be recognized and work much like it would under Windows 95/98. CardWizard by Systemsoft is not available from Viking Components. To purchase a copy of CardWizard, contact:

SystemSoft Corporation
2 Vision Drive **Voice: 508.651.0088**
Natick, MA 01760 **Fax: 508.641.8188**

• Check in your "*Control Panel*" for PC Card (PCMCIA) to be sure that it has been installed.
• Check your CMOS settings to be sure that your PCMCIA/PC Card option is NOT set to disabled.
• Check with your system manufacturer or their Web site for any BIOS, PCMCIA or Hard Disk Controller updates. This is especially true if you have or are planning to upgrade to Windows 98 or Windows 2000.

Problem: Your computer does not see your CompactFlash card and adapter.

1. First check your Device Manager to be sure that you have an available IRQ. If you do not, you may have to disable a built in device.

Problem: When installing the CompactFlash and adapter, and the system gives a "bad beep" indicated by a solid beep and locks up the computer.

1. Go to "*Device Manager/Hard Disk Controllers*" and double click on "*Dual IDE Controller*."
2. Select Settings, if it shows as "*Default*", change to "*Both IDE Channels Enabled*."
3. Click "*OK*."
4. If you have a yellow "*!*" next to "*Standard IDE/ESDI Hard Disk Controller*," click once on it to highlight it, then click "*Remove*."
5. Remove the CompactFlash card and adapter from your computer and reboot.
6. Reinstall your CompactFlash card.

NOTE: During installation it may appear that the system is locked up, be patient as it could take a few minutes for the card to be installed.

Problem: Computer beeps, indicating that the PCMICA card is recognized, but there is no disk drive assigned. I/O ports 170-177 may be used by another device in your system.

1. Check the computer setting in "*Device Manager*." If the PCMCIA disk controller is using ports 170-177 try the following procedure.
2. Open "*Control Panel*" and double click the "*System*" icon.
3. On the "*Device Manager*" tab, click Properties.
4. On the "*Reserve Resources*" tab, click the "*Input/Output (I/O)*" option button, and then click "*Add*."
5. In the "*Start Value*" box, enter 170.
6. In the "*End Value*" box, enter 177.
7. Click "*OK*" until you return to "*Control Panel*."
8. Restart your computer.

• Windows will not configure any device to use I/O ports 170-177 if it can avoid doing so.
• Another option is to try disabling any secondary disk controller that uses I/O ports 170-177 in the computer's CMOS settings.

Problem: System or other device reports card is corrupt.

This can happen if power is removed from the CompactFlash card while data is being written to the card or if the device has a low power indication. If this is the case you can:

WARNING: The following procedure will erase any information you may have on your card:

1. First try to reformat the card.
2. FDISK the card then format it.

If you are unsure of how to perform an FDISK please refer to your system documentation. If this does not recover the card, please contact Technical Support.

COMPACTFLASH™ SPECIFICATIONS:

Interface
• PCMCIA PC Card ATA and True IDE mode system performance.

Start Up Time
• Sleep to write 2.5 msec max.
• Sleep to read 2.0 msec max.
• Reset to ready 50 msec typical, 400 msec max.
• Data transfer rate to/from Flash 4.0 MB/sec burst.
• Data transfer rate to/from Host 6.0 MB/sec burst.
• Delay active to sleep Programmable.
• Controller overhead command to DRQ <1.25 msec.

Power Requirements
• DC input voltage.
• Commercial 5V +/- 10%, 3.3V +/- 5%.
• Industrial 5V +/- 5%

Typical Power Dissipation
• Sleep: 200 uA (3.3V), 500uA (5V).
• Read: 32-45mA (3.3V), 46-75mA (5V).
• Write: 32-60mA (3.3V), 46-90mA (5V).

Reliability
• MTBF 1,000,000 hours.
• Data Reliability: < 1 error in 1014 bits read.

Environmental Specs
• Storage Temperature: -25˚ C to +85˚ C.
• Operating Temperature: -50˚ C to +100˚ C.
• Humidity: 8-95% non-condensing.
• Vibration: 15 G maximum.
• Shock: 2,000 G maximum.

Size
• Width: 36.4 mm.
• Length: 42.8 mm.
• Weight: 11.4 grams (maximum).

WARRANTY & DISCLAIMERS:

All Viking Components products have been thoroughly tested free of defects in material and workmanship. If any malfunction should occur while using one of our products in its recommended environment, Viking, at its option, will repair or replace the product at no charge, provided the product or any part thereof has not been abused, misused, neglected, replaced, repaired or modified. Viking shall make the final determination as to the existence and the cause of any defect. Viking will not repair or replace products designated as having a "Limited Lifetime" which fail solely because their estimated life has expired. No warranty is made with respect to customer products produced to original purchaser specifications except as specifically stated in writing by Viking.

All shipping costs shall be the responsibility of the purchaser.

Except as provided herein, there are no express or implied warranties of merchantability or fitness for a particular purpose. Under no circumstances will Viking Components be liable in any way to the purchaser for any damages, including but not limited to lost revenue, lost wages, or any other incidental or consequential damages arising out of the use of or inability to use this product. Viking reserves the right to make modifications in both hardware and software without prior notifications.

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